



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,317	04/20/2004	Hidekazu Moriyama	119294	2578
25944	7590	05/16/2007	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320				LIN, JAMES
ART UNIT		PAPER NUMBER		
		1762		
MAIL DATE		DELIVERY MODE		
		05/16/2007		
		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/827,317	MORIYAMA, HIDEKAZU
	Examiner	Art Unit
	Jimmy Lin	1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 21 March 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 7 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1762

DETAILED ACTION

Terminal Disclaimer

1. The terminal disclaimer filed on 3/21/2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent Application No. 10/827,426 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-5 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is no support for “forming banks corresponding to the film pattern on the substrate” in any particular order. Fig. 1 shows the order of cleaning steps, but never mentions the order of forming the banks. For the purpose of this examination, it will be interpreted that the banks can be formed in any order.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyashita et al. (U.S. Publication 2001/0001050) in view of Igari et al. (JP 10-337882, as provided by the Applicant) and Watanabe et al. (U.S. Patent 4,966,480).

The rejection is cited in the Office Action filed 2/22/2007.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyashita '050 in view of Igari '882 and Watanabe '480 as applied to claim 1 above, and in further view of Ozaki et al. (JP 60-139454).

The rejection is cited in the Office Action filed 2/22/2007.

Response to Arguments

7. Applicant's arguments filed 3/21/2007 have been fully considered but they are not persuasive.

Claims 1-5 as rejected under 35 U.S.C. 112, first paragraph:

The Applicant argues on pg. 2 that the rejection is improper for various reasons. However, the Applicant is directed the Response filed 12/20/2006, wherein claim 1 was amended to include the limitation of "the following steps performed in the following order". The claim requires a particular order of steps when the present specification does not provide support for the claimed order of cleaning, forming the banks, and disposing liquid droplets.

Claims 1 and 3-5 as rejected over Miyashita '050, Igari '882, and Watanabe '480:

The Applicant argues on pg. 3 that Igari does not allege that the disclosed ink print head cleaning method has a problem of preventing a clog and, thus, one of ordinary skill in the art would not have been motivated to add cleaning step of Watanabe to the combination of Miyashita and Igari which already disclose cleaning by a solvent. However, this argument is not convincing because it is not commensurate in scope with the rejection. The rejection does not add cleaning steps of Watanabe to the combination of Miyashita and Igari. Watanabe is merely used to teach the use of the solvent of the functional solution as the particular cleaning solvent.

The Applicant argues on pg. 3 that the Office Action's allegations that it would have been obvious to use purified water is neither logical nor proper because Watanabe's use of regular water indicates that regular water is suitable and because Watanabe and the other references fail to disclose that purified water is preferable for cleaning purposes. However, the teaching that regular water would be suitable would not prohibit one of ordinary skill in the art to use purified water. Such a modification of purity of a cleaning solvent would have been obvious and is not a

Art Unit: 1762

patentable difference (see MPEP 2144.04.VII.). Nevertheless, the Office Action states that one of ordinary skill in the art of EL displays would have used purified water to avoid contamination of the El element.

The Applicant argues on pg. 3-4 that the Office Action's allegations that it would have been obvious to use multiple steps involving water is neither logical nor proper because the allegation that one of ordinary skill would have been motivated to use three cleaning steps with water, rather than any other number, indicates improper reliance on Applicant's disclosure. However, the Office Action states that "cleaning the conduit and ink-jet head *multiple times*" would ensure that all the functional solution is removed" and that "it would have been obvious to one of ordinary skill in the art at the time of invention to have performed the cleaning process with water *at least three times*" (emphasis added by Examiner). The rejection is not based on the Applicant's specification of three cleaning steps, but rather on the obviousness of cleaning the ink print head *multiple times*, which would include the number three.

8. Applicant's arguments, see pg. 4, filed 3/21/2007, with respect to claims 1-5 have been fully considered and are persuasive. The obviousness-type double patenting rejection of the claims has been withdrawn.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 1762

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy Lin whose telephone number is 571-272-8902. The examiner can normally be reached on Monday thru Friday 8AM - 5:30PM

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JL
JL



KEITH HENDRICKS
PRIMARY EXAMINER